

## STORMS AND WEATHER WARNINGS.

## WASHINGTON FORECAST DISTRICT.

A disturbance of moderate intensity was centered near Cape Hatteras on the morning of the 4th. Northeast storm warnings were ordered displayed at 9 a. m. from Norfolk, Va., to Eastport, Me., in the expectation that there would be a marked increase in the storm's intensity. A velocity of 56 miles an hour from the east was reached at Atlantic City, N. J., and 72 miles from the northwest at New York City.

At 8 p. m. of the 6th a storm of marked strength was central over Lake Superior, moving northeastward, and pressure was decreasing rapidly from the lower Lake region southward to the east Gulf coast. Southwest warnings were displayed at 10 p. m. from Jacksonville, Fla., to Eastport, Me. Practically every station north of Savannah, Ga., reported a verifying velocity, the highest being 72 miles an hour from the south at New York City.

Southeast warnings were displayed from Bay St. Louis, Miss., to Cedar Keys, Fla., on the 9th and from Delaware Breakwater to Eastport, Me., on the 10th in connection with the northeastward movement of a disturbance from Texas to the southern New England coast. Pensacola, Fla., reported a maximum velocity of 44 miles an hour from the southwest and Nantucket, Mass., and Block Island, R. I., each 48 miles an hour from the northeast.

On the morning of the 15th a disturbance of considerable intensity was central over western North Carolina, moving rapidly eastward. Northeast storm warnings were ordered displayed from Norfolk, Va., to Atlantic City, N. J., and northwest warnings south of Norfolk to Cape Hatteras. These warnings were well verified, Cape Henry, Va., reporting a maximum velocity of 60 miles an hour from the northeast.

At noon of the 19th a disturbance of marked intensity and wide extent was central over Illinois, moving northeastward. Southwest warnings were displayed from Jacksonville, Fla., to Delaware Breakwater at 4 p. m., and southeast warnings from Baltimore, Md., to Eastport, Me., at 10 p. m. Verifying velocities were reached at a number of stations.

A disturbance that was over the west Gulf States on the 30th, moved rapidly northeastward to the southern New England coast during the next two days, attended by shifting gales along the Middle Atlantic and North Atlantic coasts. Warnings were displayed well in advance of the storm.

Warnings of strong winds were sent to open ports on Lake Michigan on 18 days during the month and warnings of "northers" to the Panama Canal Zone on the 2d and 21st.

Cold-wave warnings were issued for very limited areas on the 1st, 2d, 21st, and 28th, and frost warnings for portions of the Southern States on about one-third of the days of the month.—*Charles L. Mitchell.*

## CHICAGO FORECAST DISTRICT.

No special warnings of any kind were necessary in the Chicago Forecast District until the 18th, when advices were sent to the live-stock interests in Nebraska and western Kansas. On that date also heavy snow warnings were issued for northern Wisconsin and eastern Minnesota.

On the 19th, 20th, and 26th, frost warnings were issued for southeastern Kansas and southwestern Missouri, in the latter State the advices being made especially for the benefit of the strawberry growers.

The first severe cold weather of the month appeared in the Canadian Northwest on the morning of March 26. However, no cold-wave warnings were issued then as the temperature in the northern Plains States and the northern Rocky Mountain region was already rather low. On the 27th–28th, cold-wave warnings were ordered for the southern Plains States and the middle and lower Missouri and the middle Mississippi Valleys. The expected drop in temperature was quite pronounced from South Dakota southward over Nebraska and Kansas, but to the eastward the changes were not decided, as the high-pressure area accompanying the cold moved eastward to the Lake region during the 28th. Stock advices were issued for South Dakota, Nebraska, southeastern Wyoming, and western Kansas on the 27th.

Freezing temperature was indicated for southern Missouri and southeastern Illinois on the 31st.

The special forecast service to the *Reporter-Enterprise*, Oconto, Wis., begun in February, was continued during March, a forecast covering Friday, Saturday, and Sunday being telegraphed each Thursday morning. Temperature forecasts for a week in advance were sent to the Wenatchee Valley Traffic Association, Wenatchee, Wash., each Monday, to be used by the association in the protection of their fruit shipments across the northern Rockies and the northern Plains.—*E. H. Haines.*

## NEW ORLEANS FORECAST DISTRICT.

The month opened with cold weather in most sections of the district and below freezing to the middle coast of Texas. Though cold weather continued in Texas and northern Louisiana the arrival of freezing weather on the Louisiana coast was delayed until the 4th, but temperatures were only a few degrees above freezing on the 2d and 3d. On the morning of the 3d the freezing temperature forecast for the Louisiana coast was repeated and a warning of killing frost was added. Steps were taken to protect vegetation, but the less hardy crops suffered where they could not be protected. This cold spell, coming late in the winter, was as severe as any during the winter and the most injurious.

After the 4th, frost or freezing-temperature warnings were issued for portions of the district on the 6th, 7th, 9th, 10th, 15th, 20th, 21st, 25th, 26th, 27th, 28th, and 31st.

Warnings for live-stock interests in northwestern Oklahoma and the Texas panhandle were issued on the 8th. Rather heavy snow occurred in these sections on the 9th, with temperatures below freezing.

The month may be characterized as windy and rainy, due to the frequent occurrence of southwestern LOWS which passed northeastward over the district.

On the 1st a disturbance of moderate intensity was central over southern Mississippi and a large area of high pressure was central over South Dakota. The cold-wave warning issued the preceding day was repeated for southern Louisiana and northwest storm warnings were continued on the east coast of Texas, small-craft warnings being displayed on the west coast of Texas. These warnings were verified.

Small-craft warnings were displayed on the Texas coast on the 8th, 9th, 13th, 25th, 29th, 30th, and 31st, and on the Louisiana coast on the 9th, 13th, and 25th.